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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,904	04/12/2004	Paul A. Rota	6395-67788-01	7102

46135 7590 09/07/2005
KLARQUIST SPARKMAN, LLP
121 S.W. SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EXAMINER

MOSHER, MARY

ART UNIT	PAPER NUMBER
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1648

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/822,904	Applicant(s) ROTA ET AL.	
	Examiner Mary E. Mosher, Ph.D.	Art Unit 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,15-18 and 24 is/are pending in the application.
4a) Of the above claim(s) 2,4-10 and 15-18 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 4/12/2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/20/04</u> <u>8/16/04</u> <u>MM</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I in the reply filed on May 6, 2005 is acknowledged. The traversal is on the ground(s) that groups I, III, and IV should be examined together because each has the common component of being a nucleic acid comprising SEQ ID NO:1 or a fragment thereof, a search for the shared component will inevitably uncover references pertinent to all three groups, the three groups share common classification, and the subject matter of groups I and III have not acquired a separate status from the art. This is not found persuasive because, as previously indicated, the fragments of SEQ ID NO:1 are seen as subcombinations usable together, which are properly restrictable from each other and from the combination. A search for the full genomic sequence will not inevitably uncover the most relevant prior art for fragmentary sequences, as the large number of "close hits" on later-published SARS sequences will overwhelm the search for the "poor hits" which are early partial sequences. In addition, since much of the relevant art is present in provisional applications supporting published applications, and the disclosures in the provisional applications are not machine searchable, determining the effective date of disclosure for each segment of the genome for each potential reference is quite burdensome. The argument that a full viral genome (group I) has not acquired separate status in the art from an open reading frame (group III) is not convincing, since those in the SARS art found that a full genomic sequence warranted a separate press release even after release of a sequenced open reading frame.

The requirement is still deemed proper and is therefore made FINAL.

Claims 2, 4-10, 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Amended claim 1 has been examined for parts (a) and (b); part (c) has been withdrawn from consideration, being drawn to the invention of group III. Applicant timely traversed the restriction (election) requirement in the reply filed on May 6, 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by any of the following Genbank accession numbers:

AY274119.1 GI:29826276, available 14 April 2003, 99.9% identical to seq 1

AY278487.1 GI:30027613, available 21 April 2003, 96.8% identical to seq 1

AY278554.1 GI:30023518, available 18 April 2003, 98.2% identical to seq 1

AY278491.1 GI:30023952, available 18 April 2003, 99.9% identical to seq 1

Each of the published sequences discloses an isolated nucleic acid more than 95% identical to applicant's SEQ 1, thereby meeting the claim limitations.

In addition, the website "SARS-associated Coronavirus" is cited as evidence that sequence data similar to AY274119.1 GI:29826276 was publicly available on 12 April, 2003.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Peiris et al US 2005/0181357 or Chan et al WO 2004/085633. SEQ ID NO:15 (figure 10) in Pieris or Chan is the same as Genbank AY278491 (see paragraph 006 of Pieris) and is disclosed in provisional application 60/464,886 Figure 10, giving this subject matter an effective date of 23 April 2003.

Claims 1 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Rappuoli et al WO 2004/092360. Rappuoli discloses the draft sequence published on the "SARS-associated Coronavirus" web site, see page 2 lines 30-33 and SEQ ID NO:1, and the same sequence is disclosed in Figure 301 in provisional application 60/462748, giving this subject matter an effective date of 13 April 2003. Rappuoli also discloses the Urbani strain sequence as published on the internet by the Centers for Disease Control, see the passage spanning pages 2-3 and SEQ ID NO:2. This sequence is disclosed in provisional application 60464109 as Figure 501, giving this subject matter an effective date of April 14, 2003. Since this appears to be the same as applicant's SEQ ID NO:1, this reference also anticipates claim 24.

Conclusion

Art Unit: 1648

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is 571-272-0906. The examiner can normally be reached on M-T and alternate F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/30/05



MARY E. MOSHER, PH.D.
PRIMARY EXAMINER

Mosher, Mary

From: Low, Christopher
Sent: Thursday, July 14, 2005 10:45 AM
To: Mosher, Mary
Subject: RE: 10822904

approved

Christopher Low
SPE 1614 / TCAR 1600
REM 3E88 / (571) 272-0951

-----Original Message-----

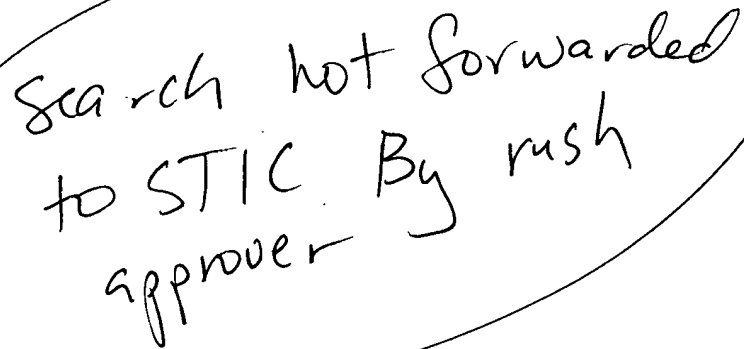
From: Mosher, Mary
Sent: Thursday, July 14, 2005 10:18 AM
To: Low, Christopher
Subject: 10822904

Justification - 2-month amended case.

Please do regular and interference search for SEQ ID NO:1. Could I have results both on paper and on disk?
Thanks

Mary Mosher
AU 1648
571-272-0906
Office Rem 3D25
Mail Rem 3C18

Mary Mosher
AU 1648
571-272-0906
Office Rem 3D25
Mail Rem 3C18



Search not forwarded
to STIC By rush
approval

Mosher, Mary

From: Mosher, Mary
Sent: Monday, August 08, 2005 11:35 AM
To: Fredman, Jeffrey
Cc: Chan, Christina
Subject: Rush request 10/822904

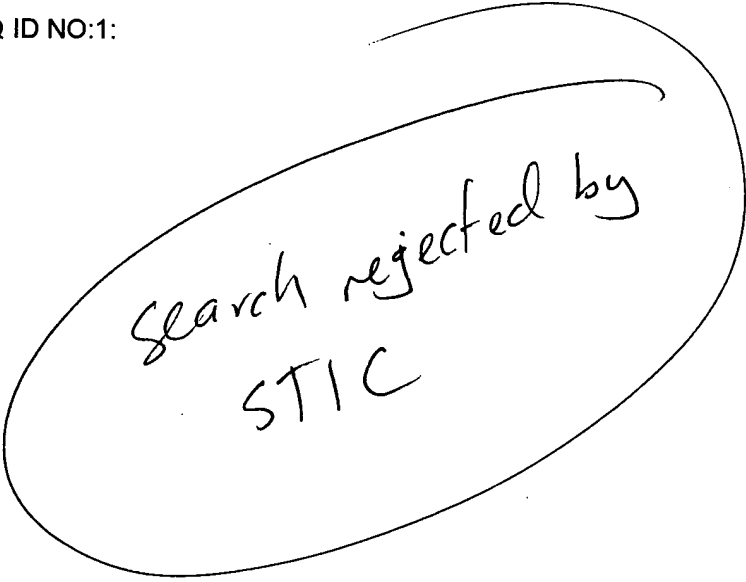
Justification - overdue amendment, there was a mixup in forwarding a previous request.

Please search the following segments of SEQ ID NO:1:

1-3,000
3,001-6,000
6,001-9,000
9,001-12,000
12,001-15,000
15,001-18,000
18,001-21,000
21,001-25,000
25,001-28,000
28,001-end

Could I have the results on disk? Thanks.

Mary Mosher
AU 1648
571-272-0906
Office Rem 3D25
Mail Rem 3C18



Search rejected by
STIC

From: Fredman, Jeffrey
Sent: Thursday, August 11, 2005 1:58 PM
To: STIC-Biotech/ChemLib
Cc: Mosher, Mary
Subject: FW: Rush search 10/822904

PLEASE RUSH this alignment.

I approve.

Jeff Fredman

(Please note Mary's comment that the version matters and please use the correct GI numbers.
Thanks, Jeff)

-----Original Message-----

From: Mosher, Mary
Sent: Thursday, August 11, 2005 1:00 PM
To: Fredman, Jeffrey
Subject: Rush search 10/822904

I've simmered down and I'm trying again. Justification for rush: the case is now well overdue, and my last 2 sequence search requests did not go through.

Please align SEQ ID NO:1 with the following sequences. Please pay attention to the versions, later versions will not work as prior art. Thanks. Could I have the results on paper and on disk please?

AY278741.1 GI:30027617

AY274119.1 GI:29826276

AY278487.1 GI:30027613

AY278488.1 GI:30027614

AY278489.1 GI:30027615

AY278490.1 GI:30027616

AY278491.1 GI:30023952

AY278554.1 GI:30023518

AY279354.1 GI:30061319

NC_004718.1 GI:29826277

Mary Mosher
AU 1648
571-272-0906
Office Rem 3D25
Mail Rem 3C18

STAFF USE ONLY

Searcher: _____
Searcher Phone: 2- _____
Date Searcher Picked up: _____
Date Completed: _____
Searcher Prep/Rev. Time: _____
Online Time: _____

Type of Search

NA#: _____ AA#: _____
Interference: _____ SPDI: _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure#: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____